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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,551	11/20/2003	Darryl P. Klein	W-9652-01	3546

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EXAMINER
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WOOD, ELIZABETH D

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/719,551

Applicant(s)

KLEIN, DARRYL P.

Examiner

Elizabeth D. Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-100 is/are pending in the application.
- 4a) Of the above claim(s) 1-23, 53-79 and 89-100 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-52 and 80-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/12/05</u> | 6) <input type="checkbox"/> Other: _____  |

### ***Specification***

The examiner has not checked the specification to the extent necessary to determine the presence of **all** possible minor errors (grammatical, typographical and idiomatic). Cooperation of the applicant(s) is requested in correcting any errors of which applicant(s) may become aware of in the specification, in the claims and in any future amendment(s) that applicant(s) may file.

Applicant(s) is also requested to complete the status of any copending applications referred to in the specification by their Attorney Docket Number or Application Serial Number, **if any**.

The status of the parent application(s) and/or any other application(s) cross-referenced to this application, **if any**, should be updated in a timely manner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-52 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Because the terminology employed by the examiner appears to have confused the issue, the examiner will make the same rejection using different language to clarify the issue and address the arguments.

The reason the claims are indefinite is because they are internally inconsistent. They recite that the composition is "for use", i.e. an aqueous impregnant for making a

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catalyst. However, the support material is specifically claimed. Therefore the composition being claimed must be the actual catalyst composition, and this is the way in which the claims have been analyzed. In fact, would components (A)-(C) even be present in the final catalyst in the form in which they are recited in claim 24?

Claim 80 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 80 recites a composition prepared by impregnation of a catalyst carrier **with a stabilized aqueous composition according to any one of claims 24 through 32.** However, claims 24-32 (as discussed above) are not directed to an aqueous solution, they are directed to the final catalyst, including the carrier.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 24-52 and 80-88 remain rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,287,280 to Colgan et al. or US 4,500,424 to Simpson et al.

As in the above rejection under 35 USC 112 of claims 24-52, the examiner will modify the explanation of the reference so as to alleviate any confusion.

The instantly claimed invention as presented in claims 24-52 recites several components (apparently actually part of the aqueous impregnant composition used to make the final product) and a support material. Claim 80 recites a catalyst "prepared by" impregnation. Claims 85+ recite a catalyst carrying specific metals and having specific characteristics. It would appear that this composition is produced when the disclosed aqueous impregnant is used to impregnate the carrier.

Colgan et al. and Simpson et al. both disclose typical support materials such as silica, alumina, silica alumina, and so forth. With respect to the characteristics of the foraminiferous claimed by applicant in **claims 85-88**, since there is no apparent difference between the carriers employed by applicant and those disclosed by

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patentees, the "compositional" features would be considered to be shared by the applicant's support and that of patentees, absent some convincing showing of evidence to the contrary. Alternately, the examiner continues to assert that the pore diameter is a result-effective variable and the skilled artisan would be expected to select carriers having appropriate pore diameter, volume distribution, and so forth depending on the ultimate intended use of the composition. This position is buttressed by applicant's statements on the top of page 17 of the arguments. Simpson teaches a specific pore distribution for a specific reason, indicating that such modification is within the skill of the artisan. Additional evidence of this position can be found in US 4,188,743 to Simpson et al. and US 5,498,586 to Dai et al.

With respect to claims 24-52, the examiner considers that the components of the compositions as set forth in the instant claims do not differ substantially from those of the prior art. The main difference between the claimed composition and that of the references is the claimed requirement that the Group VIII impregnant be insoluble in water. The references make no mention of this limitation; however, Simpson et al. discloses a carbonate impregnant, identified by applicant as insoluble (Note, however that Simpson defines this as a **soluble** material). See column 7 of Simpson et al. The examiner considers that any impregnant would have been obvious in this process, however, because the significance of selection cannot be determined. As a solution is made by adding the phosphorus component prior and the other metal prior to introduction of the Group VIII metal, the solubility of the substance in water is really not relevant as long as it is soluble or can be dispersed to some degree in the final

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impregnant solution. Both references teach this to be the final result. Accordingly, such limitation would not appear to lend patentable moment to the process under examination. See also columns 3 and 4 of Colgan et al. ***Applicant should additionally note that the claims recite a catalyst composition. When dried, there would not appear to be any difference in the final catalyst being produced, and the claims recite a catalyst, NOT the impregnating solution. Unless applicant wishes to present the claims in product-by-process format, and allege that the process steps result in a distinct final product, arguments with respect to the identity of the impregnating solution carry no weight in an evaluation of the patentability of the final product.***

With respect to the claims that recite “uncalcined”, it is pointed out that this limitation in no way excludes the step of calcining the carrier or the final catalyst product at some point in the production. In fact, applicant’s own claims 84 and 88 do so. The examples that applicant attempts to rely on as patentable distinctions to the composition under examination are not present in all claims, not remotely commensurate with the claimed subject matter. Accordingly, the instant claims are not “limited” to an uncalcined composition as asserted by applicants and there has been no demonstration that the point of product calcinations is the sole reason for any alleged differences between the composition of the prior art and that obtained by applicant. Additionally, precalcination in the prior art is taught “generally”, but is not necessarily a requirement. Accordingly, absent some showing linking time of calcination (all other conditions being

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equal), applicants have not demonstrated criticality to the identity of the final product catalyst under examination.

***Conclusion***

Applicant's arguments filed January 17, 2006 have been fully considered but they are not persuasive to the extent set forth hereinabove.

Applicants are advised that any evidence to be provided under 37 CFR 1.131 or 1.132 and any amendments to the claims and specification should be submitted prior to final rejection to be considered timely. It is anticipated that the next office action will be a final rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth D. Wood whose telephone number is 571-272-1377. The examiner can normally be reached on M-F, 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Elizabeth D. Wood  
Primary Examiner  
Art Unit 1755

edw